

Notice of Allowability

Application No.

09/545,072

Applicant(s)

LIN ET AL.

Examiner

Anne R. Kubelik

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to amendment and response filed 6/28/04.
2. ☒ The allowed claim(s) is/are 40-72, renumbered 1-15, 18-20, 16-17, 21-23, 28-30, 24-27 and 31-33, respectively.
3. ☐ The drawings filed on 27 November 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Art Unit: 1638

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James DeCamp on 29 September 2004.

IN THE CLAIMS:

Claims 27-39 are cancelled without prejudice.

Claim 40 (currently amended). An isolated nucleic acid molecule comprising a sequence encoding a polypeptide having at least 95% identity with the amino acid sequence shown in Fig. 2B (~~SEQ ID NO:2~~) SEQ ID NO:2, wherein silencing of expression of said nucleic acid molecule, in a plant, results in said plant having abnormal storage deposition and a the shrunk phenotype of *sseI* seeds.

Claim 41 (currently amended). The isolated nucleic acid molecule of claim 40, wherein the nucleic acid molecule comprises ~~the nucleic acid sequence shown in Fig. 2A (SEQ ID NO:1)~~ SEQ ID NO:1.

Claim 42 (currently amended). The isolated nucleic acid molecule of claim 40, wherein the polypeptide comprises ~~the amino acid sequence shown in Fig. 2B (SEQ ID NO:2)~~ SEQ ID NO:2.

Claim 43 (currently amended). A construct comprising a promoter operably linked to the
~~The isolated nucleic acid molecule of claim 40, wherein the nucleic acid molecule further~~
~~comprises a promoter operably linked to the nucleic acid molecule.~~

Claim 44 (currently amended). ~~The isolated nucleic acid molecule~~ construct of claim 43,
wherein the promoter is a constitutive promoter.

Claim 45 (currently amended). ~~The isolated nucleic acid molecule~~ construct of claim 43,
wherein the nucleic acid molecule is linked to the promoter in an antisense orientation.

Claim 47 (currently amended). The expression vector of claim 46, wherein the nucleic acid molecule comprises ~~the nucleic acid sequence shown in Fig. 2A (SEQ ID NO:1)~~ SEQ ID NO:1.

Claim 48 (currently amended). The expression vector of claim 46, wherein the polypeptide comprises ~~the amino acid sequence shown in Fig. 2B (SEQ ID NO:2)~~ SEQ ID NO:2.

Art Unit: 1638

Claim 51 (currently amended). The expression vector of claim 46, wherein the nucleic acid molecule is linked to the promoter in an the antisense orientation.

Claim 53 (currently amended). The cell of claim 52, wherein the nucleic acid molecule comprises ~~the nucleic acid sequence shown in Fig. 2A (SEQ ID NO:1)~~ SEQ ID NO:1.

Claim 54 (currently amended). The cell of claim 52, wherein the polypeptide comprises ~~the amino acid sequence shown in Fig. 2B (SEQ ID NO:2)~~ SEQ ID NO:2.

Claim 55 (currently amended). ~~The A cell of claim 52, wherein the nucleic acid molecule further comprises a promoter operably linked to the nucleic acid molecule~~ comprising the construct of claim 43.

Claim 61 (currently amended). The plant or plant component of claim 60, wherein the nucleic acid molecule comprises ~~the nucleic acid sequence shown in Fig. 2A (SEQ ID NO:1)~~ SEQ ID NO:1.

Claim 62 (currently amended). The plant or plant component of claim 60, wherein the polypeptide comprises ~~the amino acid sequence shown in Fig. 2B (SEQ ID NO:2)~~ SEQ ID NO:2.

Art Unit: 1638

Claim 63 (currently amended). ~~The A plant or plant component of claim 60, wherein the nucleic acid molecule further comprises a promoter operably linked to the nucleic acid molecule comprising the construct of claim 43.~~

Claim 65 (currently amended). The plant or plant component of claim 63, wherein the nucleic acid molecule is linked to the promoter in an the antisense orientation.

Claim 71 (currently amended). A cell from a plant or plant component of claim 60, wherein the cell comprises the nucleic acid molecule.

IN THE TITLE

A SSE NUCLEIC ACID MOLECULES AND USES THEREOF ENCODING THE ARABIDOPSIS SSE1 PROTEIN AND A METHOD OF USING IT TO MODIFY PLANT STORAGE RESERVES

IN THE ABSTRACT

Disclosed is a ~~novel~~ *Arabidopsis sse1* gene, which ~~that~~ is responsible for protein and oil body biogenesis. ~~Methods and compositions are also provided for identifying genes having at least 30% identity to an Arabidopsis SSE1 polypeptide (SEQ ID NO:2).~~ The invention further provides methods for using the disclosed gene[s] for modifying the components of plant storage reserve materials.

Art Unit: 1638

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (571) 272-0801. The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (571) 272-0804. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Anne R. Kubelik, Ph.D.
September 29, 2004



**ANNE KUBELIK
PATENT EXAMINER**